### **AMP 0101 PUS**

# PADDED ATHLETIC TRAINING DEVICE

## **TECHNICAL FIELD**

**[0001]** The present invention relates generally to an athletic training device, and in particular to a volleyball training device to assist a player in developing blocking skills.

#### **BACKGROUND ART**

**[0002]** Tedious practice and experience are required in order to become proficient at most games or sports. This is particularly true for team sports where different individuals are required to specialize at one or more aspects for the benefit of team success. Therefore, practice and experience are part of the challenge that people look for in playing a team sport. This is particularly true for the sport of volleyball. Unfortunately, while players must practice the various aspects of the game to improve their specialty, there are very few training aids to assist a volleyball player in improving their skills. To the extent any training aids exist, they suffer from a variety of disadvantages.

**[0003]** Current volleyball training aids that exist to help players develop blocking skills are typically bulky and heavy. As such they are difficult to use, often require use by more than one person and cannot be utilized for long periods of time. Additionally, because these blocking training aids are heavy and relatively cumbersome, they do not provide realistic training situations. For example, a person holding a current training device would not typically be able to participate in any drill or game using the

device. Moreover, these prior training devices for blocking in the sport of volleyball, in addition to having practical deficiencies, are relatively ineffective as they do not provide adequate training. Further, another conventional training method to assist a player in improving their blocking skills involves standing on a chair adjacent to the net. While this method does not utilize a heavy or cumbersome device, it can be relatively dangerous and the person or the chair is relegated to a specific area and has no ability to move laterally.

**[0004]** It would therefore be desirable to provide a volleyball training blocking device that is relatively lightweight, easier to use, and more accurately simulates game situations.

## SUMMARY OF THE INVENTION

**[0005]** It is therefore an object of the present invention to provide an athletic training device for the sport of volleyball to help a player improve their blocking skills.

**[0006]** It is another object of the present invention to provide a volleyball training device to assist a player in developing their blocking skills that is relatively lightweight and is easy to use.

[0007] In accordance with the above and other objects of the present invention a volleyball training device is provided. The training device is a blocking pad that includes a front layer, which is intended to contact a hit ball, and a rear layer, which is intended to absorb force transmitted from the front layer. An insert portion is disposed between and secured to each of the front layer and the rear layer. The insert portion is constructed of a relatively stiff material to block the ball, but also has sufficient flexibility to move rearward.

The device includes a hand receiving portion secured thereto to allow receipt of a user's hand therein.

**[0008]** The objects and advantages of the invention will be best understood from the following description of the preferred embodiments, when viewed in conjunction with the accompanying drawings.

### BRIEF DESCRIPTION OF THE DRAWINGS

**[0009]** Figure 1 is a perspective view of a volleyball training device in use in accordance with a preferred embodiment of the present invention;

**[0010]** Figure 2 is a side view of a volleyball training device illustrating both a flexed and an unflexed condition in accordance with a preferred embodiment of the present invention;

**[0011]** Figure 3 is a rear view of a volleyball training device in accordance with a preferred embodiment of the present invention; and

**[0012]** Figure 4 is a side cross-sectional view of a volleyball training device in accordance with a preferred embodiment of the present invention.

# DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0013] Referring now to the Figures, which illustrate an athletic training device in accordance with the present invention. The training device 10 is preferably intended for use as a volleyball blocking pad, such as to assist a front row player, such as a blocker, in reaching over the net to practice blocking a volleyball. The device 10 will similarly assist the front row player on the other side of the net, such as a hitter, in playing and/or spiking the ball

so as to practice attacking, practice defense or to practice attempting to avoid the blocking device. The disclosed device 10 is intended to provide a larger obstruction above the net than a player's hands to block the ball, even when used by persons of varying sizes. The blocking device 10 may be used in a variety of different drills to provide better defense. Moreover, while the blocking device 10 is intended for use in the sport of volleyball, it will be understood that it can be used in a variety of other sports for the purpose of benefiting drills and building skills without the requirement of bulky, permanent or inhibiting equipment. While a single blocking device is shown on only one hand, it will be appreciated that a device may be used on both hands simultaneously.

[0014] The device 10, as discussed in more detail below, is preferably built of a lightweight material. This lightweight aspect allows athletes or other users of the device to perform comparable to normal circumstances with minimal arm fatigue, normal foot/body motion to keep the game flowing more normal like in an actual match play. The device 10 preferably allows a user to move his/her arms normally, separately and regardless of his/her average size and still provide effective net play.

**[0015]** The device 10 preferably takes the configuration described below. As shown in Figure 4, the device 10 has an inner absorbing portion 12. The inner absorbing portion 12 is preferably comprised of a foam material. However, any other suitable absorbing material may also be utilized, including rubber or the like. The inner absorbing portion 12 is constructed so that it is thick enough to absorb the force of a struck ball that contacts the device and is soft enough to allow the ball to be absorbed slightly.

**[0016]** As shown in Figure 4, the inner absorbing portion 12 is preferably divided into a front absorbing portion 14 and a rear absorbing portion 16. The front portion 14 is intended to contact a ball and absorb some force, as discussed above. The rear portion 16 is intended to provide some cushion for a user's hand, as is also discussed in more detail below. The rear portion 16 is preferably thicker than the front portion 14 of the inner absorbing portion 12. It should be understood that the relative thicknesses of the rear portion 16 with respect to the front portion 14 may vary. Further, the inner absorbing portion 12 may be constructed of only a single piece or more than two pieces as desired.

[0017] The inner absorbing portion 12 has an insert portion 18 disposed therein. The insert portion 18 is preferably constructed of a relatively stiff material. More particularly, the insert portion 18 is constructed from a plastic material. Nevertheless, the insert portion 18 is selected so as to allow some flexibility in the device 10 so that the device 10 will bend backward, as shown in Figure 4, similar to the natural bending motion of a human hand. However, the insert portion 18 should also be stiff enough to prevent bending back of the device too far. This will prevent the ball from consistently traveling through or over the block. It will be understood that the insert portion 18 may thus be constructed from a variety of materials that satisfy this criteria.

[0018] As shown, the insert portion 18 is preferably disposed between the front portion 14 and the rear portion 16. Alternatively, more than one insert portion 18 may be interposed in the inner absorbing layer 12. Further, the insert portion 18, can take on a variety of sizes and may desirably only be disposed in the upper portion of the device 10.

**[0019]** In the preferred embodiment, the front portion 14 is preferably glued or otherwise secured to one side of the insert portion 18. Similarly, the rear portion 16 is preferably glued or otherwise secured to the other side of the insert portion 18. It should be understood that the attachment or securing of the inner absorbing layer 12 to the insert portion 18 may be accomplished in a variety of ways.

[0020] The inner absorbing layer 12 preferably has a separate outer cover 20 disposed therearound to provide a protective covering. The outer cover 20 is preferably constructed of a fabric that is sewn around the inner absorbing layer 12 and the insert portion 18. Alternatively, the outer cover 20 can be secured around the inner absorbing layer and the insert portion 18 by conventional hook and loop attachment, a zipper attachment or a variety of other attachment methods. The outer cover 20 can thus be removed as desired for cleaning. While the outer cover 20 is preferably constructed of a fabric material, it will be understood by one of skill in the art that the outer cover 20 may be comprised of a variety of other materials.

Se Co

attachment portion 22 secured thereto. The hand attachment portion 22 is intended to receive a user's hand and allows the user to move the blocking device 10 as if it were an extension of the user's hand. The hand attachment portion 22 is preferably configured in the shape of a glove. However, a variety of other configurations may be utilized including a mitten, straps, elastic band, or the like. The hand attachment portion 22 is preferably sewn onto or otherwise attached to the rear portion 16. Alternatively, it may be sewn, glued or otherwise attached to the outer cover 20. As shown, in the glove configuration, the index finger may be at least partially exposed.

**[0022]** Having now fully described the invention, it will be apparent to one of ordinary skill in the art that many changes and modifications can be made thereto without departing from the spirit or scope of the invention as set forth herein.